

VARICELLA (CHICKEN POX)

General Principles

- In utero infection may occur by transplacental passage of the virus.
- Maternal infection that occurs within 7 to 10 days of delivery is associated with severe fetal infection that may result in neonatal death in one-third of cases.
- Infection transmitted via respiratory droplets.
- Period of highest contagion/infectivity is 2-3 days PRIOR to the onset of the rash.

Maternal Clinical Manifestations

- Incubation period: 10-21 days. A vesiculopapular rash occurs shortly after prodromal symptoms of fever and malaise.
- Pneumonia is a common complication.

Diagnosis

- Typical intranuclear inclusion bodies may be demonstrated in scrapings of the base of the vesicles.
- Antibodies are detectable two to four weeks after infection.

Maternal Treatment

- Treatment is generally supportive with the use of antihistamines to control pruritus and local cleansing to prevent secondary infection of open lesions. VZIG is only effective within 72 hours of exposure and it does NOT prevent fetal infection.
- Pneumonia may lead to significant alveolar-capillary block, hypoxia, and death. Hospitalization and aggressive support are indicated when pulmonary symptoms are present.
- Acyclovir is recommended **ONLY** in complicated cases or in immunocompromised patients (e.g., HIV infected).

Neonatal Clinical Manifestations

- Maternal infection early in pregnancy has been associated with numerous fetal anomalies including limb atrophy, cortical atrophy, and scarring of the skin.
- Convulsive disorders and paralysis in the neonate have been reported.
- Infants born within 7 to 10 days of maternal infection will generally develop severe infection with significant mortality.

NEONATAL TREATMENT: No generally satisfactory treatment is available, although the use of Zoster immune globulin (VZIG) may be of some benefit.